Form PTO-14	49	U.S. DEPARTIVIEN	IT OF COMMER	CE	ATTY. DOCKET NO.		SERIAL NO		0
(MODIFIED)		PATENT AND TRADEMARK OFFICE		078883/0120		09/533,798			
PE CONTROL			APPLICANT						
INFORMATION DISCLOS				Miles	William CA	RROLL et	al.		
		(A	U6 1 1 2000 曼		FILING DATE		GROUP AR	T UNIT	
	(Use se	everal sheets if neces	ssary)		3/24/20	00		1643-1	648
			TENT & TENS. PA	TEN	T DOCUMENTS				
EXAMINER		DOCUMENT DATE		ALANAE.	01.400	SUB-		DATE	
INITIAL	REF		DATE		NAME	CLASS	CLASS		F PRIATE
(O)	A1	5,118,672	06/92	Sch	inazi et al.	514	47		
	<u></u>		FOREIGN	PAT	ENT DOCUMENTS				
		DOCUMENT		COUNTRY	CLASS	SUB-	TRANS	LATION	
	REF	NUMBER	DATE		COUNTRY	CLASS	CLASS	YES	NO
0	A2	99/15684	04/99	WIP	0				
	А3	99/15683	04/99	WIP	0				
	A4	89/07947	09/89	WIP	0				
V	A5	92/03568	03/92	WIP	0				
		OTHER DOCUM	MENTS (Include	ing A	uthor, Title, Date, Pe	rtinent Pages,	Etc.)		
\sim		Guschlbauer et al.	, "Poly-2'-deoxy-	2'-flu	oro-cytidylic acid: enzy	matic synthesis	, spectroscop	ic	
49	A6	Characterization an	d interaction with	n poly	-inosinic acid" 1977 Nu	ıcleic Acids Res	s. 4:1933	4:1933	
1	A7	Schibahara et al., "Site-directed cleavage of RNA" 1987 Nucleic Acids Res. 15:4403							
	4.0	Gershon et al, "The nucleotide sequence around the capripoxvirus thymidine kinase gene reveals a gene Shared specifically with leporipoxvirus" J. Gen. Virol. 70:525, 1989				ene			
	A8								
	A9	Weir et al., "Nucleotide sequence of the vaccinia virus thymidine kinase gene and the nature of spontane				neous			
	Frameshift mutations" J. Virol. 46:530 ,1983								
	A10	Esposito et al., "Nu	ucleotide sequen	ce of	the thymidine kinase g	ene region of m	onkeypox an	d variola v	viruses"
		Virology 135:561, 1984							
	A11	Kilpatrick et al., "Cloning and physical mapping of yada monkey tumor virus DNA" Virology 143:399, 1985							
	A12	Binns et al., "Comparison of a conserved region in fowlpox virus and vaccinia virus gnomes and the							
		translocation of the fowlpox virus thymidine kinase gene"J. Gen. Virol 69:1275, 1988							
	A13	Schnitzlein et al., "A rapid method for identifying the thymidine kinase genes of avipoxviruses" J. Virological							
		Method 20:341, 1988							
	A14	Fathi et al., "Efficient targeted insertion of an unselected marker into the vaccinia virus genome" Virology 97-							
Ą		105, 1986							
EXAMINER	1	M_2			DATE CONSIDE	1 1			
	7	014.12.0	05			3/4/0			· · · · · · · · · · · · · · · · · · ·
	MINER: through	Initial if citation of citation in	considered, w conformance	heth and	er or not citation is not considered. I	s in conforma nclude anv c	ance with M opy of this	iPEP 609 form wi	th next
		tion to applicant.		~u					

150

Sheet 2 of 6

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.		
(MODIFIED)		PATENT AND TRADEMARK OFFICE	078883/0120	09/533,798		
•		PEVC	APPLICANT			
INF	ORMATI	ON DISCLOSURE CITATION 6	Miles William CARROLL et al.			
		ON DISCLOSURE CITATION OF AUG 1 1 2000	FILING DATE	GROUP ART UNIT		
	(Use se	everal sheets if necessary)	3/24/2000	1643 /648		
		OTHER DOCUMENTS (We uding A	uthor, Title, Date, Pertinent Pages,	Etc.)		
100		Graham et al., "A new technique for the assay of infectivity of human adenovirus 5 DNA" Virol. 52, 456-467,				
C(Q)	A15	1973				
\	A16	Straibinger et al., "Liposomes as carriers	s for intracellular delivery of nucleic aci	ds" Methods in Enzymology,		
	Alo	101: 512-527 1983				
	A17	Studier et al., "Use of T7 RNA polymerase to direct expression of cloned genes" Methods in Enzymol.				
	Α17	185: 60-89, 1990				
	A18	Matthias et al., "Eukaryotic expression ve	ectors for the analysis of mutant protei	ns" 1989 NAR 17, 6418		
	A19	Wootton & Federhen, "Statistics of local	tton & Federhen, "Statistics of local complexity in amino acid sequences and sequence database" 1993,			
	Als	Computers and Chemistry 17:149-163				
	A20	Myers et al., "Isolation of a cDNA encodie	ng 5T4 oncofetal trophoblast glycoprotein" 1994 J. Biol. Chem			
	7420	169:9319-9324				
	A21	Starzynska et al., "Prognostic significano	ce of 5T4 oncofetal antigen expression	in colorectal" Br. J. Cancer		
		1994 May; 69(5):899-902				
	A22	Starzynska et al., "The expression of 5T4 antigen in colorectal and gastic carcinoma" Br. J. Cancer 1992				
	AZZ	Nov; 66(5):867-869				
A23 Hobbs et al., "polynucleotides containing 2'-amino-2'-deoxyribose and 2'-azido-2'deoxyr			-2'deoxyribose"1973			
	Biochemistry 12:5138					
•	A24	Starzynska et al., "5T4 oncofetal antigen in gastric carcinoma and its clinical significance" Eur J.				
		Gastroenterol Hepatol 1998 Jun;10(6)479-484				
j	A25	Carsberg et al., "Metastasis-associated 5	5T4 antigen disrupts cell-cell contacts	and induces cellular motility in		
		epithelial cells" 1996, Int J Cancer Sep 27				
	Yewdell et al., "TAP-independent delivery of antigenic peptides to the endoplasmic reticulum: therapeuti					
-	potential and insights into TAP-dependent antigen processing" 1998 J Immunotherapy 21:127-31					
	A27	Calvert et al., "Fowlpox virus recombinants expressing the envelope glycoprotein of an avian				
reticuloendotheliosis retrovirus induce neutralizing antibodies and reduce viremia in chickens" J. of Vi			a in chickens" J. of Virol			
	ļ	67:3069-3076, 1993				
	A28	Carroll et al., "Construction and characterization of a triple-recombinant vaccinia virus encoding B7-1,				
 		interleukin 12, and a model tumor antigen" 1998 J. Natl. Cancer Inst. 90(24):1881-1887				
	A29	"Two bright new faces in gene therapy" N				
EXAMINER	X	17 42	DATE CONSIDERED			
=	<u> </u>	· , a. O 1	3 4103	MADED COO. Drow line Abrevah		
citat	MINER: I ion if no icant	nitial if citation considered, whether or it in conformance and not considered.	not citation is in conformance with . Include any copy of this form	with next communication to		

Sheet 3 of 6

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.	
(MODIFIED)		PATENT AND TRADEMARK OFFICE	078883/0120	09/533,798	
		PEVO	APPLICANT		
INFO	PRMATI	ON DISCLOSURE CITATION O	Miles William CARROLL et al.		
		PATENT AND TRADEMARK OFFICE P E JC ON DISCLOSURE CITATION AUG 1 1 2000	FILING DATE	GROUP ART UNIT	
	(Use se	everal sheets if necessary)	3/24/2000	_1643 1648	
		OTHER DOCUMENTS DECluding A	uthor, Title, Date, Pertinent Pages,	Etc.)	
-	A30	Pieken et al., "Kinetic characterization of ribonuclease-resistant 2'-modified hammerhead ribozymes" 1991			
(10,		Science 253:314-317			
1		Parker et al., "Scheme for ranking potential HLA-A2 binding peptides based on independent binding of			
	A31	individual peptide side-chains" 1994 J. Immunol. 152:163-175			
	400	Fu et al., "An endoplasmic reticulum-targ	eting signal sequence enhances the in	nmunogenicity of an	
	A32	immunorecessive simian virus 40 large T antigen cytotoxic T-lymphocyte epitope" 1998 J. Virol 72:1469-81			
	400	Schodel et al., "hepatitis B virus core and e antigen: immune recognition and use as a vaccine carrier moiety"			
	A33	1996 Intervirology 39:104-10			
	A34	Wolff and Trubetskoy, "The cambrian po	eriod of nonviral gene delivery" 1998 n	ature Biotechnology 16:421-	
		423			
	405	Taylor et al., "Biological and immunogen	ic properties of a canarypox-rabies rec	ombinant, ALVAC-RG (vCP65)	
	A35	in non-avian species" 1995 Vaccine 13:539-549			
	A36	Stannard et al., "Evidence for incomplete replication of a penguin poxvirus in cells of mammalian origin"			
	J. Gen. Virol. 1998 79:1637-46				
	A37	Mackett et al., "Vaccinia virus: a selectable eukaryotic cloning and expression vector 1982 PNAS 79: 7415-			
	737	7419			
	A38	Upton et al, "Identification and nucleotide sequence of the thymidine kinase gene of shope fibroma virus" J.			
	730	Virology 60:920, 1986			
	A39	Boyle et al, "Fowlpox virus thymidine kin	ase: nucleotide sequence and relationships to other thymidine		
	A39	kinases" Virology 156:355-365, 1987			
Lewis et al, "Human immunodeficiency virus infection of cells arrested in the cell cycle" 1992 E			ell cycle" 1992 EMBO J		
	A40	11:3053-3058			
0.44		Lewis and Emerman "Passage through mitosis is required for oncoretroviruses but not for the human			
A41 immunodeficiency virus" 1994 J. Virol. 68:510-516			:510-516		
	A42	Mackett et al, "General method for production and selection of infectious vaccinia virus recombinants			
V		expressing foreign genes" 1984, J. Virol.			
EXAMINER	()	57265	DATE CONSIDERED		
* EXAM	on if no	nitial if citation considered, whether or t in conformance and not considered	not citation is in conformance with . Include any copy of this form	MPEP 609; Draw line through with next communication to	

Sheet 4 of 6

Form PTO-1449		49	U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.		
(MODIFIED)			PATENT AND TRADEMARK OFFICE	078883/0120	09/533,798		
OE JO			PEVO	APPLICANT			
INFORMATION DISCLOSURE CITATION				Miles William CA	RROLL et al.		
(AUG 1 1 2000)				FILING DATE	GROUP ART UNIT		
		(Use se	everal sheets if recessary)	3/24/2000	-1643 1648		
•			OTHER DOCUMENTS A Cluding A	uthor, Title, Date, Pertinent Pages,	Etc.)		
. (20	A 42	Hruby et al, "Fine structute analysis and nucleotide sequence of the vaccinia virus thymidine kinase gene"				
ان	O_1	A43	PNAS 80:3411-3415, 1983				
		0.44	Lytvyn et al, "Comparison of the thymidine dinase genes from three entompoxiruses" J. Gen Virol				
. \		A44	73:3235-3240 1992				
		A45	Smith et al., "Vaccinia virus immune eva	sion" 1997, Immunol Rev. 159:137-154	ļ		
		A 4 G	Jenkins et al, "Formation of lentivirus par	rticles by mammalian cells infected wit	h recombinant fowlpox virus"		
		A46	AIDS Research and Human Retroviruses	7:991-998, 1991			
		A47	A47 Taylor et al, "Recombinant fowlpox virus inducing protective immunity in non-avian species" Vaccine 6:497-				
			503, 1988				
		• 40	Sphener et al. and Boursnell et al, "Insertion of the fusion gene from newcastle disease virus into a non-				
		A48	essential region in the terminal repeats of fowlpox virus and demonstration of protective immunity induced by				
			The recombinant" 1990 J. Gen. Virol. 71:621-628				
		4.40	Nakano et al, "Molecular genetics of vaccinia virus: demonstration of marker rescue" Proc. Natl. Acad. Sci.				
		A49	USA 79, 1593-1596, 1982				
		A E O	Chakrabarti et al., "Vaccinia virus expres	ssion vector: coexpression of β-galacto	sidase provides visual		
		A50	screening of Recombinant virus plaques"	" Mol. Cell. Biol. 3403-3409, 1985			
	Wigler et al, "Transformation of		Wigler et al, "Transformation of mammali	an cells with genes from procaryotes a	and eucaryotes" Cell 777-785,		
		A51	1979				
		A52	Graessmann et al,"Microinjection of tissue culture cells" Meth. Enzymology 101, 482-492, 1983				
A53		۸۲۵	Franke et al, "Neomycin resistance as a dominant selectable marker for selection and isolation of vaccinia				
		AD3	virus recombinants" Mol Cell biol 1918-1924, 1985				
4		Λ .	Altenburger, W., Suter, C.P. and Altenburger J., "Partial deletion of the human host range gene in the				
		A54	attenuated vaccinia virus MVA" 1989 Arcl	n. Virol. 105, 15-27			
EXAMI	NER	10	D2 &2	DATE CONSIDERED			
U U 1 1. 1 a. 0 >)11.1a. 07	3/4/03			
*	EXAN	MINER: I	nitial if citation considered, whether or t in conformance and not considered	not citation is in conformance with . Include any copy of this form	MPEP 609; Draw line through with next communication to		
	applicant.						

Sheet 5 of 6

Form P10-14	149	U.S. DEPARTMENT OF COMMERCE	ATT. DOCKET NO.	SERIAL NO.			
(MODIFIED)		PATENT AND TRANSPORTED	078883/0120	09/533,798			
			APPLICANT Miles William CARROLL et al.				
INFORMATION DISCLOSURE CITATION AND 1 1 2000							
/ Aug ' ·			FILING DATE	GROUP ART UNIT			
	(Use se	everal sheets if necessary)	3/24/2000	-1643 1648			
		OTHER DOCUMENTS (Including A					
,0	A55	Neumann et al., "Gene transfer into mouse lyoma cell by electroporation in high electric fields" EMBO J. 1,					
CLO	A33	841-845, 1982					
	A56	Schaffner, "Direct transfer of cloned genes form bacteria to mammalian cells" Proc. Natl. Acad. Sci. USA					
	750	77,2163-2167, 1980					
	A = 7	Nestle FO et al, "Vaccinatio of melanoma patients with peptide- or tumor lysate-pulsed dendritic cells" Nat.					
	A57	Med. 1998 Mar;4(3):328-32					
	A58	Altschul et al, "Issues in searching mole	cular sequence database" 1994 Nature	e Genetics 6;119-129.			
	450	Carroll & Moss, "Host range and cytopat	hogenicity of the highly attenuated MV	A strain of vaccinia virus:			
	A59	propagation and generation of recombinant viruses in a nonhuman mammalian cell line",					
		1997 Virology 238:198-211					
		Kim CJ et al., "Dendritic cell infected with poxviruses encoding Mart-1/melan a sensitive T Lymphocytes in					
	A60 vitro" J. Immunother, 1997 Jul;20(4):276-86						
	404	Schneider et al., "enhanced immunogen	hneider et al., "enhanced immunogenicity for CD8+ T cell induction and complete protective efficacy of				
	Aoı	malaria DNA vaccination by boosting with modified vaccinia virus Ankara" 1998 Nat Med 4:397-402					
	A62	Chakrabarti et al, "Compact, synthetic, vaccinia virus early/late promoter for protein expression" 1997					
	AOZ	Biotechniques 23:1094-1097					
	A63	Wyatt et al., "Development of replication-	-deficient recombinant vaccinia virus vaccine effective against				
	A03	parainfluenza virus 3 infection in an anim	al model" 1996 Vaccine 14:1451-1458				
	Sutter et al, "A recombinant vector derived from the host range-restricted and highly attenuated MV			ighly attenuated MVA strain			
	A64	Of vaccinia virus stimulates protective immunity in mice to influenza virus", 1994 Vaccine 12:1032-1040					
	A65	Carroll and Moss "E. coli β-glucuronidase (GUS) as a marker for recombinant vaccinia viruses" 1995					
	A65	Biotechniques 19:352-355					
		Hirsch et al., "Patterns of viral replication correlate with outcome in simian immunodeficiency virus (SIV)-					
4	A66	infected macaques: effect of prior immunization with a trivalent SIV vaccine in modified vaccinia virus					
		Ankara" 1996 J. Virol 70:3741-3752					
EXAMINER	7	XOD RO	DATE CONSIDERED				
011.0.85			3/4/03				
* EXAM	MINER:	Initial if citation considered, whether or t in conformance and not considered	not citation is in conformance with	MPEP 609; Draw line through with next communication to			
	cant.	the Comormance and not considered	. moldae any copy of this form	Hogy communication to			

Sheet 6 of 6

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.		
(MODIFIED)		PATENT AND TRADEMARK OFFICE	078883/0120	09/533,798		
		() C	APPLICANT			
INFO	RMATI	ON DISCLOSVIRE CITATION 👸	Miles William CA	RROLL et al.		
		AUG 1 1 2000 🕏	FILING DATE	GROUP ART UNIT		
	(Use se	everal sheets if necessary)	3/24/2000	1643 1648		
		OTHER DOCUMENTS (Including A	uthor, Title, Date, Pertinent Pages,	Etc.)		
	A67	Sutter and Moss, "Nonreplicating vaccinia vector efficiently expresses recombinant genes" 1992 Proc. Natl.				
MO	Α01	Acad Sci USA 89:10847-10851				
,	A68	Bronte et al., "Antigen expression by dendritic cells correlates with the therapeutic effectiveness of a model				
	Auo	recombinant poxvirus tumor vaccine" 199	97, Proc. Natl Acad Sci USA 94(7):3183-3188			
	A69	Wyatt et al., "Replication-deficient vaccinia virus encoding bacteriophage T7 RNA polymerase for transient				
	7.00	gene expression in mammalian cells" 1995 Virology 210:202-205				
	470	Carroll et al., "Highly attenuated modified vaccinia virus Ankara (MVA) as an effective recombinant vector: a				
	A70	Murine tumor model" 1997 Vaccine, 15:387-394				
	A71	Sutter et al, "Non-replication vaccinia vector efficiently expresses bacteriophage T7 RNA polymerase"				
	ALI	1995 FEBS lett. 371:9-12				
	A72 Overwijk et al, "gp100/pmel 17 is a murine tumor rejectio antigen induction of "Self" - reactive, tumoricida			Self" - reactive, tumoricidal T		
		cells using high-affinity, altered peptide light	gand", (1998) J. Exp. Med. 188: 277-28	36		
1	A73	Hole N, and Stern PL, "Isolation and characterization of 5T4, a tumor-associated antigen", (1990) Int. J.				
₹		Cancer 45(1): 179-184				
	!					
EXAMINER		000	DATE CONSIDERED			
		0) 1	3 4 103			
* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.						